

## THE CLAIMS

- 1 1. (previously presented) A telephone to packet adapter for routing an outgoing call issued  
2 by a telephone set in a user's home, said adapter comprising:  
3 a telephone line interface configured to be connected to a user's home telephone line;  
4 a telephone interface configured to be connected to the telephone set;  
5 a packet network interface configured to be connected to a packet network;  
6 a controller circuit interconnecting said telephone line interface, said telephone interface  
7 and said packet network interface;  
8 said controller circuit being so configured as to route said outgoing call to one of said  
9 telephone line and said packet network interfaces depending on at least one preestablished  
10 routing rule;  
11 wherein said at least one preestablished routing rule is such that a) said outgoing call is  
12 routed to said telephone line interface when a dialled telephone number is a local call and b) said  
13 outgoing call is routed to said packet network interface when the dialled telephone number is not  
14 a local call.
- 1 2. (previously presented) A telephone to packet adapter as recited in claim 1, wherein said  
2 packet network interface is a Local Area Network interface configured to be connected to said  
3 packet network via a Local Area Network.
- 1 3. (previously presented) A telephone to packet adapter as recited in claim 1, wherein said  
2 packet network interface is a Local Area Network interface configured to be connected to said  
3 packet network via a Local Area Network packet network gateway.

1 4. (previously presented) A telephone to packet adapter as recited in claim 1, wherein said  
2 controller circuit includes an embedded agent software controlling the routing of the outgoing  
3 call.

1 5. (canceled)

1 6. (previously presented) A telephone to packet adapter for routing an outgoing call issued  
2 by a telephone set in a user's home, said adapter comprising:

3 a telephone line interface configured to be connected to a user's home telephone line;

4 a telephone interface configured to be connected to the telephone set;

5 a packet network interface configured to be connected to a packet network;

6 a controller circuit interconnecting said telephone line interface, said telephone interface  
7 and said packet network interface;

8 said controller circuit being so configured as to route said outgoing call to one of said  
9 telephone line and said packet network interfaces depending on at least one preestablished  
10 routing rule;

11 wherein said at least one preestablished routing rule is such that said outgoing call is  
12 routed to said telephone line interface when no packet network address corresponding to a  
13 dialled telephone number exist.

1 7. (previously presented) A telephone to packet adapter as recited in claim 1, wherein said  
2 at least one preestablished routing rule is such that said outgoing call is routed to said telephone  
3 line interface when a dialled telephone number is an emergency number.

1 8. (previously presented) A telephone to packet adapter for routing an outgoing call issued  
2 by a telephone set in a user's home, said adapter comprising:

3 a telephone line interface configured to be connected to a user's home telephone line;

4 a telephone interface configured to be connected to the telephone set;

5 a packet network interface configured to be connected to a packet network;

6 a controller circuit interconnecting said telephone line interface, said telephone interface  
7 and said packet network interface;

8 wherein said controller circuit includes a telephone number database of telephone  
9 numbers that may be reached via the packet network; said at least one preestablished routing rule  
10 is such that a) said outgoing call is routed to said telephone line interface when a dialled  
11 telephone number is not present in said telephone number database and b) said outgoing call is  
12 routed to said packet network interface when the dialled telephone number is listed in said  
13 telephone number database.

1 9. (previously presented) A telephone to packet adapter for routing an outgoing call issued  
2 by a telephone set in a user's home, said adapter comprising:

3 a telephone line interface configured to be connected to a user's home telephone line;

4 a telephone interface configured to be connected to the telephone set;

5 a packet network interface configured to be connected to a packet network;

6 a controller circuit interconnecting said telephone line interface, said telephone interface  
7 and said packet network interface;

8 wherein said at least one preestablished routing rule is such that said outgoing call is  
9 routed to said telephone line interface when said packet network is inactive.

1 10. (original) A telephone to packet adapter as recited in claim 1, further including a speech  
2 encoder/decoder associated to said controller circuit to encode and decode data routed by said  
3 controller circuit.

1 11. (currently amended) A telephone to packet adapter comprising:  
2 a telephone line interface configured to be connected to a user's home telephone line;  
3 a telephone interface configured to be connected to a telephone set;  
4 a Local Area Network interface configured to be connected to a Local Area Network;  
5 a packet network interface configured to be connected to a packet network; and  
6 a controller circuit interconnecting said telephone line interface, said telephone interface,  
7 said Local Area Network interface and said packet network interface; said controller circuit  
8 being so configured as to either a) route said telephone interface to one of said telephone line and  
9 said packet network interfaces ~~and~~ or b) route said Local Area Network interface to one of said  
10 telephone line and said packet network interfaces, depending on at least one preestablished  
11 routing rule;

12 wherein said at least one preestablished routing rule is such that a) one of said telephone  
13 interface and said Local Area Network interface is routed to said telephone line interface when a  
14 dialled telephone number is a local call and b) one of said telephone interface and said Local  
15 Area Network interface is routed to said Local Area Network interface when the dialled  
16 telephone number is not a local call.

1 12. (original) A telephone to packet adapter as recited in claim 11, wherein said controller  
2 circuit includes an embedded agent software controlling the routing of said telephone and Local  
3 Area Network interfaces.

1 13. (canceled)

1 14. (original) A telephone to packet adapter as recited in claim 11, wherein said at least one  
2 preestablished routing rule is such that one of said telephone interface and said Local Area  
3 Network interface is routed to said telephone line interface when no packet network address  
4 corresponding to a dialled telephone number exist.

1 15. (original) A telephone to packet adapter as recited in claim 11, wherein said at least one  
2 preestablished routing rule is such that one of said telephone interface and said Local Area  
3 Network interface is routed to said telephone line interface when a dialled telephone number is  
4 an emergency number.

1 16. (original) A telephone to packet adapter as recited in claim 11, wherein said controller  
2 circuit includes a telephone number database of telephone numbers that may be reached via the  
3 packet network; said at least one preestablished routing rule is such that a) one of said telephone  
4 interface and said Local Area Network interface is routed to said telephone line interface when a  
5 dialled telephone number is not present in said telephone number database and b) one of said  
6 telephone interface and said Local Area Network interface is routed to said Local Area Network  
7 interface when the dialled telephone number is listed in said telephone number database.

1 17. (original) A telephone to packet adapter as recited in claim 11, wherein said at least one  
2 preestablished routing rule is such that one of said telephone interface and said Local Area  
3 Network interface is routed to said telephone line interface when said packet network is inactive.

1 18. (original) A telephone to packet adapter as recited in claim 11, further including a speech  
2 encoder/decoder associated to said controller circuit to encode and decode data routed by said  
3 controller circuit.

1 19. (previously presented) A method for routing a telephone call issued by a telephone set in  
2 a user's home via a telephone to packet adapter provided with a telephone line interface, a  
3 telephone interface, a packet network interface and a controller circuit interconnecting the  
4 telephone line, telephone and packet network interfaces; said method comprising the steps of:

5 connecting a user's home telephone line to the telephone line interface;

6 connecting the telephone set to the telephone interface;

7 connecting the adapter to a packet network via the packet network interface;

8 running an agent software for routing the telephone call to either the telephone line  
9 interface or the packet network interface depending on at least one preestablished routing rule;

10 wherein said at least one preestablished routing rule includes a long distance call routing  
11 rule; said long distance call routing rule dictates that the telephone interface is to be routed to the  
12 packet network interface when a number dialled onto the telephone set is a long distance call.

1 20. (previously presented) A routing method as recited in claim 19, wherein said packet  
2 network connecting step includes the substep of connecting a Local Area Network to the packet  
3 network interface.

1 21. (previously presented) A routing method as recited in claim 19, wherein said at least one  
2 preestablished routing rule includes a local call routing rule; said local call routing rule dictates  
3 that the telephone interface is to be routed to the telephone line interface when a number dialled  
4 onto the telephone set is a local call.

22. (canceled)

23. (previously presented) A method for routing a telephone call issued by a telephone set in a user's home via a telephone to packet adapter provided with a telephone line interface, a telephone interface, a packet network interface and a controller circuit interconnecting the telephone line, telephone and packet network interfaces; said method comprising the steps of:

- connecting a user's home telephone line to the telephone line interface;
- connecting the telephone set to the telephone interface;
- connecting the adapter to a packet network via the packet network interface;
- running an agent software for routing the telephone call to either the telephone line interface or the packet network interface depending on at least one preestablished routing rule;

wherein said at least one preestablished routing rule includes a default routing rule; said default routing rule dictates that the telephone interface is to be routed to the telephone line interface when either a) a number dialled onto the telephone set has no corresponding packet network address or b) the packet network is inactive.

24. (previously presented) A routing method as recited in claim 19, wherein said at least one preestablished routing rule includes an emergency call routing rule; said emergency call routing rule dictates that the telephone interface is to be routed to the telephone line interface when a number dialled onto the telephone set is an emergency number.

1    25.    (previously presented) A method for routing a telephone call issued by a telephone set in  
2    a user's home via a telephone to packet adapter provided with a telephone line interface, a  
3    telephone interface, a packet network interface and a controller circuit interconnecting the  
4    telephone line, telephone and packet network interfaces; said method comprising the steps of:  
5            connecting a user's home telephone line to the telephone line interface;  
6            connecting the telephone set to the telephone interface;  
7            connecting the adapter to a packet network via the packet network interface;  
8            running an agent software for routing the telephone call to either the telephone line  
9    interface or the packet network interface depending on at least one preestablished routing rule;  
10          wherein said at least one preestablished routing rule includes a database determined  
11    routing rule; said database determined routing rule dictates that a) the telephone interface is  
12    routed to the packet network interface when a number dialled onto the telephone set is present in  
13    a database of the controller circuit; and b) the telephone interface is routed to the telephone line  
14    interface when a number dialled onto the telephone set is not present in the database.



1 26. (previously presented) A method for routing outgoing telephone calls to a packet  
2 network via a telephone to packet adapter provided with a telephone line interface, a telephone  
3 interface, a Local Area Network interface, a packet network interface and a controller circuit  
4 interconnecting the telephone line, telephone, packet network and Local Area Network  
5 interfaces; said method comprising the steps of:

6 connecting a user's home telephone line to the telephone line interface;

7 connecting a telephone set to the telephone interface;

8 connecting a Local Area Network to the Local Area Network interface;

9 connecting a packet network interface to the packet network interface;

10 running an agent software for routing either a) the telephone interface to one of the  
11 telephone line interface and the packet network interface, or b) the Local Area Network interface  
12 to one of the telephone line interface and the packet network interface, depending on at least one  
13 preestablished routing rule.

1 27. (previously presented) A routing method as recited in claim 26, wherein said at least one  
2 preestablished routing rule includes a local call routing rule; said local call routing rule dictates  
3 that one of the telephone interface and the Local Area Network interface is to be routed to the  
4 telephone line interface when a number dialled onto the telephone set is a local call.

1 28. (previously presented) A routing method as recited in claim 26, wherein said at least one  
2 preestablished routing rule includes a long distance call routing rule; said long distance call  
3 routing rule dictates that one of the telephone interface and the Local Area Network interface is  
4 to be routed to the Local Area Network interface when a number dialled onto the telephone set is  
5 a long distance call.

1 29. (previously presented) A routing method as recited in claim 26, wherein said at least one  
2 preestablished routing rule includes a default routing rule; said default routing rule dictates that  
3 one of the telephone interface and the Local Area Network interface is to be routed to the  
4 telephone line interface when either a) a number dialled onto the telephone set has no  
5 corresponding packet network address or b) the packet network is inactive.

1 30. (previously presented) A routing method as recited in claim 26, wherein said at least one  
2 preestablished routing rule includes an emergency call routing rule; said emergency call routing  
3 rule dictates that one of the telephone interface and the Local Area Network interface is to be  
4 routed to the telephone line interface when a number dialled onto the telephone set is an  
5 emergency number.

1 31. (previously presented) A routing method as recited in claim 26, wherein said at least one  
2 preestablished routing rule includes a database determined routing rule; said database determined  
3 routing rule dictates that a) one of the telephone interface and the Local Area Network interface  
4 is routed to the Local Area Network interface when a number dialled onto the telephone set is  
5 present in a database of the controller circuit; and b) one of the telephone interface and the Local  
6 Area Network interface is routed to the telephone line interface when a number dialled onto the  
7 telephone set is not present in the database.

1 32. (canceled)

1 33. (previously presented) A telephone to packet adapter for routing an outgoing call issued  
2 by a telephone set, said adapter consisting essentially of:

3 a telephone line interface configured to be connected to a telephone line;

4 a telephone interface configured to be connected to the telephone set;

5 a packet network interface configured to be connected to a packet network; and

6 a controller circuit interconnecting said telephone line interface, said telephone interface  
7 and said packet network interface;

8 wherein said controller circuit is configured to route said outgoing call to one of said  
9 telephone line and said packet network interfaces depending on at least one preestablished  
10 routing rule.

1 34. (previously presented) The adapter of claim 33, wherein said at least one preestablished  
2 routing rule is such that a) said outgoing call is routed to said telephone line interface when a  
3 dialed telephone number is a local call and b) said outgoing call is routed to said packet network  
4 interface when the dialed telephone number is not a local call.

1 35. (previously presented) The adapter of claim 33, wherein said at least one preestablished  
2 routing rule is such that said outgoing call is routed to said telephone line interface when no  
3 packet network address corresponding to a dialed telephone number exists.

1 36. (previously presented) The adapter of claim 33, wherein said controller circuit includes a  
2 telephone number database of telephone numbers that may be reached via the packet network,  
3 and said at least one preestablished routing rule is such that a) said outgoing call is routed to said  
4 telephone line interface when a dialed telephone number is not present in said telephone number  
5 database and b) said outgoing call is routed to said packet network interface when the dialed  
6 telephone number is listed in said telephone number database.

1 37. (previously presented) The adapter of claim 33, wherein said at least one preestablished  
2 routing rule is such that said outgoing call is routed to said telephone line interface when said  
3 packet network is inactive.

1 38. (previously presented) The adapter of claim 33, wherein said at least one preestablished  
2 routing rule is such that said outgoing call is routed to said telephone line interface when a dialed  
3 telephone number is an emergency number.